Author's response to reviews

Title: Self-testing for cancer: a community survey

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Author's response to reviews: see over
Dear Mr Cassady-Cain

MS: 1191257595167345 - Self-testing for cancer: a community survey

Thank you for your email of 28 November with links to the two reviewers’ comments. We are grateful to the reviewers for their thoughtful and useful comments and have addressed each of the points raised in order.

Reviewer 1: Gerald Haidinger

Point 1: On page 4, line 9 there seems to be a remnant “is”
This has now been deleted.

Point 2: On page 5 the term “FOB” should be described when used for the first time (the same is true for “PSA”).
The terms “FOB” and “PSA” have now been written in full on page 5.

Point 3: On page 6, line 3: it is unclear if “older” or ‘younger” age is meant.
The word ‘older’ has been added to page 6, line 3 to clarify this point.

Point 4: Throughout the whole manuscript, the term “sex” is preferable to the term “gender”.
We have considered amending the text. However, in the context in which it is used (i.e. ‘male gender’), the term “gender” seems to read better than “sex”, and so we have not made the suggested change. However, we would be prepared to accept the Editor’s decision on this matter.

Point 5: The legend of table 2 should give some more information to the reader what is displayed, also define “IMD” in a footnote.
An explanation of the IMD2004 has been added to the Methods section and a footnote added to the table (which has been renumbered to Table 3)
Table 2 and Table 3 have now been renumbered, to fit with the text.

Point 6: In table 3 please include sums of non-cancer tests.
Table 3 has been renumbered to Table 2. Totals of non-cancer tests have been added.

Point 7: Although the manuscript concentrates on the use of cancer-self-tests, in the discussion section it should be mentioned that pregnancy tests are the most frequently used self-tests.
This has been added to the first sentence of the Discussion.

Point 8: On page 7, line 4: the definition of “older” is missing.
We have clarified the text to demonstrate that the comparison is of mean ages.

Point 9: If at all the authors chose to include the possibility of self-tests of the genetic determinants of disease, they also should mention the possibility of misuse (e.g. condition precedent to employment).
This has been added to the final sentence of the Discussion.
Point 1: Preventive care involves a comprehensive approach to testing/self-testing, and focusing only on cancer seems overly restrictive. Accordingly, the context of this paper would be much more relevant if it were broadened to include the topic of self-testing across the spectrum of preventive health care. 

Whilst we agree that the issue of self-testing across a wider range of conditions is of considerable interest, this study aimed to establish the prevalence of self-testing for cancer (and was funded by Cancer Research UK for this purpose). A study is ongoing (Ryan A, Greenfield S, Wilson S. Prevalence and determinants of the use of self-tests by members of the public: a mixed methods study. BMC Public Health 2006, 6:193) which aims to address the broader spectrum of self-testing.

Point 2: A more interesting presentation would have been to lump the cancer related self-testing among all the other forms of self-testing. A strong rationale for such an approach would be the small proportion of individuals 35 out of 2925 responders who reported ever having used a cancer related self-test. In addition, cancer related self-tests were used by just 35 of 969 individuals who reported using any self-test for a health related condition.

As above, our aim was to determine the current prevalence of self-testing for cancer. Our ongoing work was informed by the results of this survey, and will examine the prevalence and determinants of a range of forms of self-testing.

Point 3: In the introduction, paragraph 2, the authors allude to PSA testing in “young men.” There is no evidence base to recommend PSA testing among average risk males less than 50. We agree that there is no evidence to recommend PSA testing for young men, this was put forward as a reason why people “may” choose to self test (i.e. the doctor will not supply the test)

Point 4: At the end of the third paragraph of the introduction, the authors make a statement linking self-testing as an important part of self care. This reviewer disagrees that the concept of self care equates to self testing. Rather, self care involves active discussion and decision making with the clinical care providers. This raises issues about the basis for the manuscript.

We agree that self care does not equate to self-testing. Nevertheless, self-care can be defined as encompassing 4 different types of activities (leading a healthy lifestyle, taking care of minor ailments, managing long-term conditions and following discharge from hospital) (Public Attitudes to Self Care - Baseline Survey, February 2005: Department of Health, England). Whilst some aspects of self-care involve support from health professionals, some forms of self-care can be undertaken without the support of clinical care providers and self testing may form part of self care.

Point 5: Table 1 – the authors are encouraged to add an additional column showing the P value for the comparisons between the entire sample and those who report self-testing.

In addition, they need to subtract out those who report self-testing from the total sample. These data can be simply derived from the existing table (i.e. by subtracting cancer self-test from All).

Point 6: Regarding table 2, the age grouping cross ages at which evidence-based screening recommendations begin. This is particularly problematic as it is not possible to know whether “appropriate” or “inappropriate” testing is occurring, although rates are quite low. It is not clear what this table is attempting to demonstrate. The variance estimates for these indicated rates would likely overlap making the data presented essentially meaningless.

Table 2 has been renumbered as Table 3. The age groupings chosen were pragmatic. Nevertheless, they do not cross any ages at which UK based screening recommendations begin. There are no national screening programmes for either haematuria or PSA. There is a national bowel cancer screening programme, which is targeting people aged 60-69. 95% confidence intervals have been added to the table, to demonstrate the range of imprecision in the rate estimates.

Point 7: Comments regarding table 3 – there are tremendous differences in the proportion of respondents who reported ever using versus considering use. This suggests a considerable gap between intention to take an action and actually taking that action. The authors are encouraged to discuss this observation. This has now been addressed in the Discussion.

Point 8: Paragraph 5 under the results section notes a relationship between PSA self testing and higher levels of self-reported health status. This is incorrect. P value is non-significant.
The p value is not significant and the erroneous reference to an association between PSA self-testing and higher levels of self-reported health status has now been removed.

Point 9: Prevalence/utilization figures are inferred from a very limited number of positive responses (n=8 for FOBT testing, 13 for haematuria, and 16 for PSA testing). It would seem that such limited numbers of positive responses would lead to unstable estimates. We have added the 95% Confidence Intervals to table 3, to enable the imprecision of the estimate to be seen.

Point 10: In the discussion, paragraph 1, second to last sentence, the authors note that the survey found a relatively high level of use of and interest in cancer self-tests. This reviewer disagrees with this statement since the overall rate of utilization is about 1 in 100. We were surprised that as many as 1 in 100 of the population reported having used a cancer self-test and 36% reported that they would consider future use.

Point 11: The authors are encouraged to consider the significance of their findings in the context of public health and preventive health care. We have added a reference to our recent Editorial which discussed the potential impact of increased self-testing and self care.

Point 12: The issue about generalizability since this study is based on four general practices in a large UK city, is not discussed. There is a comparison of the study respondents with the population in these four areas, but no large comparison to the UK population. We have reported the characteristics of our population, stated that selection bias may have occurred and calculated standardized rates to enable generalization.

Point 13: The issue of self-testing raises several issues including perceived risk versus actual risk, appropriate versus inappropriate use of the test, correct test procedures (incorrect procedures could result in a false negative test), as well as the issue of appropriate follow-up for positive/abnormal tests. Do the authors have any data to examine these related issues. These are interesting questions that we would like to pursue in the future. Unfortunately, we did not collect data that would enable us to address these points.

Point 14: This study was done in the UK, is hematuria testing recommended? In the United States, there is no evidence base to recommend testing for hematuria. May require some explanation.
Testing for neither haematuria nor PSA are recommended in the UK as methods of screening for cancer.

Minor Essential Revisions

Point 1: There are several typographical errors throughout the text that can be addressed through careful editing. Typographical errors have now been amended.

Point 2: Please clarify what the “index of multiple deprivation” refers to. Is this a measure of socioeconomic status? This might be clarified for readers from outside of the UK. Please see response to Reviewer 1, point 5.

We trust that we have addressed the reviewers’ comments in a satisfactory manner and look forward to hearing the outcome of our resubmission.

Yours sincerely

Sue Wilson (on behalf of the authors)
Professor of Clinical Epidemiology